

WHAT IS CLAIMED IS:

1. An optical data medium comprising a substrate that is optionally already coated with one or more reflective layers and on the surface of which have been applied

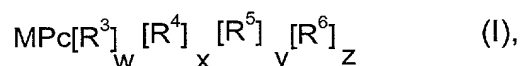
- 5 (1) an information layer that can be recorded on using light, wherein the information layer contains (i) a light-absorbing compound comprising at least one phthalocyanine and (ii) optionally a binder,
- (2) optionally one or more reflective layers, and
- (3) optionally a protective layer or a further substrate or a covering
- 10 layer,

wherein the optical data medium can be recorded on and read using blue light.

2. An optical data medium according to Claim 1 wherein the substrate is transparent.

- 15 3. An optical data medium according to Claim 1 wherein the blue light is provided by a laser light.

4. An optical data medium according to Claim 1 wherein the phthalocyanine dye corresponds to the formula (I)



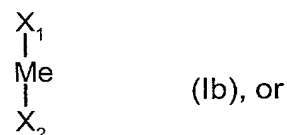
- 20 in which

Pc represents a phthalocyanine,

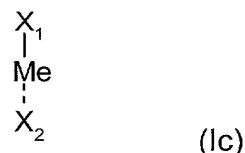
M represents two independent H atoms, a divalent metal atom, a trivalent axially monosubstituted metal atom of the formula (Ia)



- 25 a tetravalent axially disubstituted metal atom of the formula (Ib)



a trivalent axially monosubstituted and axially monocoordinated metal atom of the formula (Ic)



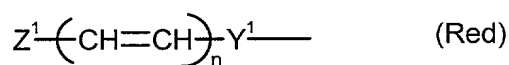
with the proviso that when X_1 or X_2 is a charged ligand, the charge is compensated by an oppositely charged ion, in which

X^1 and X^2 , independently of one another, represent halogen, hydroxyl, oxygen, cyano, thiocyanato, cyanato, alkenyl, alkynyl, arylthio, dialkylamino, alkyl, alkoxy, acyloxy, alkylthio, aryl, aryloxy, $-O-SO_2R^8$, $O-PR^{10}R^{11}$, $-O-P(O)R^{12}R^{13}$, $-O-SiR^{14}R^{15}R^{16}$, NH_2 , alkylamino and the radical of a heterocyclic amine,

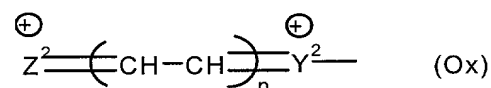
R^3 , R^4 , R^5 and R^6 correspond to substituents of the phthalocyanine and independently of one another, represent halogen, cyano, nitro, alkyl, aryl, alkylamino, dialkylamino, alkoxy, alkylthio, aryloxy, arylthio, SO_3H , $SO_2NR^1R^2$, CO_2R^9 , $CONR^1R^2$, $NH-COR^7$, or a radical of the formula $-(B)_m-D$, in which

B denotes a bridge member selected from the group consisting of a direct bond, CH_2 , CO, $CH(\text{alkyl})$, $C(\text{alkyl})_2$, NH, S, O, or $-CH=CH-$, such that $(B)_m$ denotes a chemically reasonable sequence of bridge members B with $m = 1$ to 10, and

D represents the monovalent radical of a redox system of the formula



or



or represents a metallocenyl radical or metallocenylcarbonyl radical, wherein Z^1 and Z^2 , independently of one another, represent $NR'R''$, OR'' , or SR'' ,

Y^1 represents NR' , O, or S,

5 Y^2 represents NR' ,

n represents 1 to 10, and

R' and R'' , independently of one another, represent hydrogen, alkyl, cycloalkyl, aryl or hetaryl, or form a direct bond or a bridge to one of the C atoms of the

10 $-(CH=CH)_n-$ or $-(CH-CH)_n-$ chain,

w , x , y and z , independently of one another, represent 0 to 4 and the sum $w+x+y+z$ is ≤ 16 ,

R^1 and R^2 , independently of one another, represent hydrogen, alkyl, hydroxyalkyl, or aryl, or R^1 and R^2 , together with the N atom to which they are bonded, form a heterocyclic 5-, 6-, or 7-membered ring, optionally with participation of further hetero atoms, and

R^7 and R^{16} , independently of one another, represent alkyl, aryl, hetaryl, or hydrogen.

20 5. An optical data medium according to Claim 4 wherein M represents

- (1) two independent H atoms or a divalent metal atom selected from the group consisting of Cu, Ni, Zn, Pd, Pt, Fe, Mn, Mg, Co, Ru, Ti, Be, Ca, Ba, Cd, Hg, Pb, and Sn,
- (2) a trivalent axially monosubstituted metal atom of the formula (Ia) in which Me represents Al, Ga, Ti, In, Fe, or Mn, or
- 25 (3) a tetravalent metal atom of the formula (Ib) in which Me represents Si, Ge, Sn, Zn, Cr, Ti, Co, or V.

6. An optical data medium according to Claim 4 wherein
M represents a radical of the Formula (Ia) in which Me represents Al,
X₁ and X₂ represent halogen, aryloxy, or alkoxy, and
w, x, y, and z each represent 0.
- 5 7. An optical data medium according to Claim 4 wherein
M represents a radical of the Formula (Ib) in which Me represents Si,
X₁ and X₂ represent halogen, aryloxy, or alkoxy, and
w, x, y, and z each represent 0.
- 10 8. A process for the production of the optical data medium
according to Claim 1 comprising coating a substrate that is optionally
already coated with a reflective layer with a phthalocyanine dye, optionally
in combination with suitable binders and additives and optionally suitable
solvents, and optionally providing the substrate with a reflective layer,
further intermediate layers, and optionally a protective layer or a further
15 substrate or a covering layer.
9. A process for the production of the optical data media
according to Claim 8 wherein the coating with the phthalocyanine dye is
effected by spin-coating, sputtering, or vapor deposition.
- 20 10. An optical data medium having a recordable information
layer, wherein the optical data medium is obtained by recording on an
optical data medium according to Claim 1 using blue light.
- 25 11. An optical data medium having a recordable information
layer, wherein the optical data medium is obtained by recording on an
optical data medium according to Claim 1 using a laser light having a
wavelength of 360 to 460 nm.